

PCT

WORLD INTELLECTUAL PROPERTY ORGANIZATION  
International Bureau

## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification <sup>6</sup> : <b>C12N 9/22, 15/52, C12P 21/06, A61K 47/48, 38/46</b>		A2	(11) International Publication Number: <b>WO 99/50398</b>
			(43) International Publication Date: 7 October 1999 (07.10.99)
(21) International Application Number: PCT/US99/06641 (22) International Filing Date: 26 March 1999 (26.03.99) (30) Priority Data: 60/079,751 27 March 1998 (27.03.98) US (71) Applicant (for all designated States except US): THE GOVERNMENT OF THE UNITED STATES OF AMERICA as represented by THE SECRETARY OF THE DEPARTMENT OF HEALTH AND HUMAN SERVICES [US/US]; Bethesda, MD 20892 (US). (72) Inventors; and (75) Inventors/Applicants (for US only): RYBAK, Susanna, M. [US/US]; 7411B Round Hill Road, Frederick, MD 21702 (US). NEWTON, Dianne, L. [US/US]; 15904 New Bedford Drive, Rockville, MD 20855 (US). (74) Agents: WEBER, Ellen, L. et al.; Townsend and Townsend and Crew LLP, Two Embarcadero Center, 8th floor, San Francisco, CA 94111-3834 (US).		(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).  <b>Published</b> <i>Without international search report and to be republished upon receipt of that report.</i>	
(54) Title: RECOMBINANT ANTI-TUMOR RNASE (57) Abstract <p>This invention provides for new recombinant ribonuclease proteins which are active when expressed by bacteria. This allows the recombinant ribonucleases of this invention to be fused in-frame with ligand binding moieties to form cytotoxic fusion proteins. Furthermore, these proteins are more active than ribonucleases currently available even though the proteins of this invention lack an N-terminal pyroglutamic acid, which has been found to be necessary for ribonucleolytic activity. Because these proteins are recombinant proteins, mutations which increase cytotoxicity can be engineered.</p>			

T0620-ET922960